

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of monitoring a digital subscriber line, the method comprising:
applying, in a coprocessor, a logical mask to monitoring a status word, the status word comprising a plurality of bits, in a the coprocessor included in a packet engine that represents an operation associated with a packet processor that includes the packet engine, with the mask applied according to a monitoring scheme for the digital subscriber line; and
providing the packet engine ~~the a~~ status of the ~~bit~~-line.
2. (Currently amended) The method of claim 1 wherein the monitoring scheme for the bit digital subscriber line includes maintaining an indicator representing the status of the ~~bit~~-line.
3. (Currently amended) The method of claim 1 wherein the monitoring scheme for the bit digital subscriber line includes maintaining an index identifying the ~~bit~~-line.
4. (Currently amended) The method of claim 1 ~~wherein monitoring the bit includes further~~ comprising maintaining an indicator representing a completion of monitoring of the ~~bit~~-line.

5. (Withdrawn) The method of claim 1 wherein monitoring the bit includes applying a logical mask to the bit.
6. (Currently amended) The method of claim 1 wherein the bits represent[[s]] servicing statuses of [[a]] digital subscriber lines.
7. (Withdrawn) The method of claim 1 wherein the bit is a portion of a word.
8. (Currently amended) A computer program product, residing on a computer readable medium, comprising instructions for causing a machine to:
apply, in a coprocessor, a logical mask to monitor a status word, the status word comprising a plurality of bits, in a the coprocessor included in a packet engine that represents an operation associated with a packet processor that includes the packet engine, with the mask applied according to a monitoring scheme for a digital subscriber line; and
provide the packet engine ~~the a~~ status of the ~~bit~~line.
9. (Currently amended) The computer program product of claim 8 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an indicator representing the status of the ~~bit~~line.
10. (Currently amended) The computer program product of claim 8 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an index identifying the ~~bit~~line.
11. (Currently amended) The computer program product of claim 8 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an indicator representing a completion of monitoring of the ~~bit~~line.

12. (Withdrawn) The computer program product of claim 8 wherein monitoring the bit includes applying a logical mask to the bit.
13. (Currently amended) The computer program product of claim 8 wherein the bit-status of the line represents a servicing status of a digital subscriber line.
14. (Withdrawn) The computer program product of claim 8 wherein the bit is a portion of a word.
15. (Currently amended) A line monitor comprises:
 - a computing device executing:
 - a process to monitor a bit-digital subscriber line by applying in a coprocessor a logical mask to monitoring a status word, the status word comprising a plurality of bits, in a the coprocessor included in a packet engine that represents an operation associated with a packet processor that includes the packet engine, with the mask applied according to a monitoring scheme for a digital subscriber line; and
 - a process to provide the packet engine ~~the~~ a status of the bit-line.
16. (Currently amended) The line monitor of claim 15 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an indicator representing the status of the bit-line.
17. (Currently amended) The line monitor of claim 15 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an index identifying the bit-line.
18. (Currently amended) The line monitor of claim 15 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an indicator representing a completion of monitoring of the bit-line.

19. (Withdrawn) The line monitor of claim 15 wherein monitoring the bit includes applying a logical mask to the bit.
20. (Currently amended) The line monitor of claim 15 wherein the ~~bit~~status of the line represents a servicing status of a digital subscriber line.
21. (Withdrawn) The line monitor of claim 15 wherein the bit is a portion of a word.
22. (Currently amended) A system comprising:
 - a coprocessor included in a packet engine that is capable of[[,]]
 - monitoring a digital subscriber line, by applying in a coprocessor, a logical mask to a status word, the status word comprising a plurality of bits representing an operation associated with a packet processor that includes the packet engine, with the mask applied according to a monitoring scheme for the digital subscriber line; and
 - providing the packet engine ~~the a~~ status of the bit-line.
23. (Currently amended) The system of claim 22 wherein the monitoring scheme for the bit digital subscriber line includes maintaining an indicator representing the status of the bit line.
24. (Currently amended) The system of claim 22 wherein the monitoring scheme for the bit digital subscriber line includes maintaining an index identifying the bit-line.
25. (Currently amended) A packet forwarding device comprising:
 - an input port for receiving packets;
 - an output for delivering the received packets; and
 - a coprocessor included in a packet engine that is capable of[[,]]

~~monitoring applying a logical mask to a status word, the status word comprising a plurality of bits, the coprocessor included in a packet engine representing an operation associated with a packet processor that includes the packet engine, with the mask applied according to a monitoring scheme for the digital subscriber line; and providing the packet engine the a status of the bit-line.~~

26. (Currently amended) The packet forwarding device of claim 25 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an indicator representing the status of the bit-line.
27. (Currently amended) The packet forwarding device of claim 25 wherein the monitoring scheme for the bit-digital subscriber line includes maintaining an index identifying the bit line.
28. (Currently amended) A method comprising:

Applying, in a coprocessor, a logical mask to ~~monitoring~~ a status word, the status word comprising a plurality of bits in a ~~monitoring~~ the coprocessor included in a network processing engine that represents the a servicing availability of a digital subscriber line associated with a network processor that includes the network processing engine, with the mask applied according to a monitoring scheme for the digital subscriber line; and providing the network processing engine data representing the servicing availability of the digital subscriber line.
29. (Currently amended) The method of claim 28 wherein the monitoring scheme for the bit digital subscriber line includes maintaining an indicator representing that the digital subscriber line is ready for servicing.

30. (Currently amended) The method of claim 28 wherein the monitoring scheme for the bit digital subscriber line includes maintaining an index variable that stores an integer identifying the digital subscriber line ready for servicing.
31. (New) The method of claim 1, wherein the monitoring scheme for the digital subscriber line comprises a weighted round robin scheme.